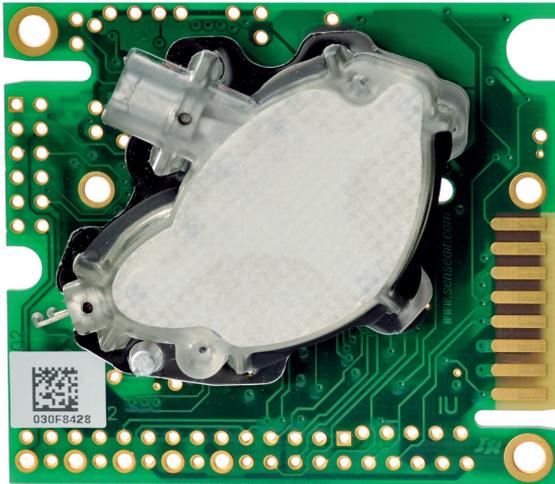


Senseair K30 FR



Fast Response CO₂ Sensor Module

Senseair K30 FR sensor module optimised for fast response time. The sample cell is well protected by a particle filter and is designed for fast diffusion without any need for external pump. In addition, there is a tube inlet to be able to feed on-line test gas through the sensor.

The module is designed for high volume production with full traceability by sensor serial number on all manufacturing processes and key components. Every sensor is individually calibrated and is provided with UART digital interface.

Senseair K30 FR is designed for simple integration into products that requires a fast update rate of CO₂ measurement.

The sensor can be used in a wide range of applications where fast changes need to be detected, such as gas leakage in food and pharmaceuticals packaging industry. Other uses are human occupancy detection and leakage detection in industry environments.

Standard specification

Measured gas	Carbon dioxide (CO ₂)
Operating principle	Non-dispersive infrared (NDIR)
Measurement range CO ₂	0–5000ppm
OUT1 Linear Output	0–10VDC = 0–5000ppm
OUT2 Linear Output	0–5VDC = 0–5000ppm
OUT3 Digital Output	On ≥ 800ppm Off ≤ 700ppm
OUT4 Digital Output	On ≥ 1000ppm Off ≤ 900ppm
Accuracy CO ₂	±30ppm ±3% of reading
Dimensions (L x W x H)	51 x 57 x 14mm
Life expectancy	> 3 years
Operating temperature range	0–50 °C
Operating humidity range	0–95% RH (non-condensing)
Power supply	4.5–14VDC
Current consumption	70mA (average)
Response time _{T90}	2 seconds @ 0.5 l/min tube gas flow
Communication	I ² C, UART (Modbus)

Key benefits

- Fast response time
- Compliant with ANSI/ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard® (WELL v2™)
- Individually calibrated
- High quality
- Long term stability



Senseair